Amendments to the Specification:

Please amend the paragraph beginning at page 6, line 11 as follows:

A first embodiment of the flue gas processing system of the present invention is shown in Fig. 1. The system 100 includes a sorbent injection system 112, particle removal device 104, and further treatment device(s) 116, all positioned downstream of boiler 108. The treated gas 120 is discharged through a stack into the exterior environment. As will be appreciated, the boiler 108 combusts a suitable fuel, typically coal. The temperature of the flue gas [[144]]144 outputted from the boiler 108 typically at least about 1,000 degrees F. When a heat exchanger (not positioned) is positioned downstream of the boiler 108 and upstream of the injection system 112, the temperature of the flue gas 148 outputted by the heat exchanger is in the range of about 250 to about 650 degrees F (which is above the acid dew point).

Please amend the paragraph beginning at page 8, line 7, as follows:

As will be appreciated, a flyash particle removal system and flue gas desulfurizer can be positioned upstream of the sorbent injection system 112 as described in copending U.S. Patent Application Serial No. ~~__/___,___~~10/804,654, filed ~~__________~~March 19, 2004, 2004, entitled "METHOD FOR REMOVING AIRBORNE TOXIC MATERIALS FROM FLUE GAS" to Durham, et al., which is incorporated herein by this reference. The flyash particles may be removed before injection of the sorbent particles by the sorbent injection system 112 or simultaneously with the removal of the sorbent particles by the particle removal system 104.

Please amend the paragraph beginning at page 9, line 1, as follows:

The sorbent injection system 112 further treats the gas to produce a compliant waste gas. The sorbent injection system [[124]]112 can have a number of differing configurations depending on the sorbent employed. The sorbent may be configured to remove air toxics, sulfur oxides, nitrous oxides, hydrochloric acid vapor, hydrogen sulfide vapor, acid gas, hydrogen fluoride, and/or condensibles (which include organic compounds). The sorbent preferably is a

free flowing particulate (carbon or non-carbon based) solid, such as activated carbon, molecular sieves, zeolites, chars, soots, aluminas, magnesium oxide, limestones, silicates such as the sorbents manufactured by Amended Silicates, LLC, mineral sorbents such as the sorbents manufactured by CDEM Holland B.Z., or another suitable sorbent material and/or carbon, molecular sieves, zeolites, and other impregnable substrates including on exposed surfaces various substances, such as metals, metal compounds, sulfur, sulfur compounds, and combinations and mixtures thereof.

Please amend the paragraph beginning at page 10, line 3, as follows:

As shown in Fig. 2, the injection system [[124]]<u>112</u> typically includes a hopper 200 in fluid communication with a comminution device 204 that comminutes the sorbent 208 to a desired size range. The bulk sorbent 208 is typically delivered by a supersack, pneumatic rail car or pneumatic truck. The comminuted sorbent 300 is conveyed pneumatically via an air eductor (not shown) powered by an air line 216 supplying air from the air source 218 (or air compressor). As air passes through the air line 216 and past the eductor, solid particles outputted by the comminution device 204 are aspirated and conveyed (by dilute phase techniques) via air line 220 directly to a plurality of injection nozzles 224a-f and distributed substantially uniformly throughout the duct 228 as a plurality of solid particles.

Please amend the paragraph beginning at page 15, line 7, as follows:

Figure 4 shows the results. The X-axis depicts the amount of carbon injected into the flue gas per unit volume of flue gas (lbs carbon per million actual cubic feet of flue gas treated, lbs/MMacf). The Y axis shows the measured mercury removal rate, measured as a percentage removed between the upstream sampling location and downstream sampling location. The percentage removal was measured for each type of sorbent. Mercury removal results were obtained for one injection concentration of DARCO INSUL only. <u>The results are shown by the character referenced as "Insul" in the legend of Fig. 4. Mercury removal results were obtained</u>

for three injection concentrations of DARCO FGD. The results are shown by the characters referenced as "FGD, FGD2 and FGD3 in the legend of Fig. 4. The results indicated that DARCO INSUL, the 6 micrometer mass mean particle diameter sorbent, was more effective than the 18 micrometer mass mean particle diameter sorbent to remove mercury from flue gas streams.